

region and is configured to transmit and receive signals over a satellite having a payload that processes the signals. The terminal has a predetermined profile that includes service class information and rate information. A hub is configured to receive system capacity resource configuration data that reflect capacity requirements of a service provider and to determine partitioning of system capacity over the region based upon the system capacity resource configuration data. The hub transmits configuration information to the payload of the satellite according to the determined partitions. The terminal is configured to transmit a bandwidth request message to the payload. The payload selectively allocates bandwidth in response to the request message based upon the configuration information. Under this arrangement, the operator of the communication system can ensure that the agreements with the multiple service providers can be efficiently managed and executed.

[13] In yet another aspect of the invention, a satellite communications system for providing communication services comprises means for receiving system capacity resource configuration data that reflect capacity requirements of a service provider. The system also includes means for receiving a predetermined profile of a terminal that is served by the communication system. The predetermined profile includes service class information and rate information. In addition, the system includes means for generating a capacity plan based upon the capacity resource configuration data and the predetermined profile. Further, the system includes means for configuring a remote processor according to the capacity plan. The remote processor is configured to process bandwidth request messages from the terminal and to selectively allocate bandwidth to the terminal in response to the bandwidth request messages. The above arrangement advantageously provides an integrated and automated approach to managing system capacity.

[14] In yet another aspect of the invention, a computer-readable medium carrying one or more sequences of one or more instructions for managing system capacity of a communication system is disclosed. The one or more sequences of one or more instructions include instructions which, when executed by one or more processors, cause the one or more processors to perform the step of receiving system capacity resource configuration data that reflect capacity requirements of a service provider. Another step includes receiving a predetermined profile of a terminal that is served by the communication system. The predetermined profile includes service class information and rate information. Additionally, other steps include generating a capacity plan based upon the capacity resource configuration data and the predetermined profile, and configuring a remote processor according to the